

Alfred Bader

Personal

BADER 2018-084

[Photographs Scrapbook]

[1938-1945]

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Original Location #: 5169

Original Box: 1

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 George Swales  
 D. M. Gray  
 Van Wecker

Aunt Annie  
 Helma Meyer



Our Kellys  
 Alaya Reed  
 Aunt Campbell

Lord; smile on this house of sinners,

Gathered round for merry cheers;

Let us forget our earthly

For we revel but once



THIRD

ANNIVERSARY.

If you insist on  
 lemonaid,  
 Follow me, my  
 pretty made;  
 However, if you'll  
 sip this licker,  
 You'll be tipsy that  
 much quiquor.



# Science Men Fear Papers

Members of the Kingston Branch of the Engineering Institute of Canada and students in the Faculty of Applied Science at Queen's University gave further demonstration of the co-operation between these two groups when they met Tuesday evening at a joint meeting.

Feature of the meeting, besides our papers on technical subjects, was a paper presenting the problem and principles involved in developing a civic swimming and racing pool by community effort. A. R. Bader, Science junior, presented a \$15 prize-winning paper on "Engineering Uses for Some Unknown Metals" and for a bid of greater and wider uses for certain metals which are now difficult or costly to extract.

C. E. Leon, another Science junior of Queen's, won second prize of \$10-worth of books for his treatise on "Fire Protection in a Small Factory." K. Rothchild, Science sophomore, also was rewarded for an interesting outline of "Industrial and Economic Aspects of the Plastics," a timely talk for all engineers.

Honorable mention was given to W. R. Meredith and J. A. Brown. Judges of the student presentations were: Prof. A. Jackson, M.E.I.C., Dr. S. D. Lash, M.E.I.C., and Lt.-Col. LeRoy F. Grant who acted as chairman of the joint meeting.

VOL. LXXX

## Science Awards

(Continued from page 1)  
*Papers with Aluminum Blades.*

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Vanadium has two important uses. One, as an alloying element with iron and the other, as a catalyst. The chief occurrences of the metal are in Peru, Southwest Africa, and the United States.

In speaking of tantalum, Mr. Bader said that it possesses many properties which make it a valuable material for construction in heat transfer systems. Besides its ability to withstand high internal pressure and chemical reaction, the metal has a high melting point, and a low vapor pressure. It is, however, found in relatively few and minor deposits, in which respect it differs from vanadium and beryllium. In conclusion, the speaker mentioned that any difficulties in the extraction of these metals will be overcome by improved methods in the future.

Mr. Leon, in his paper on *Fire Protection in a Small Factory* pointed out the many losses sustained by a concern due to fire, and he then considered: plant organization for fire drill, fire prevention and finally fire protection. The speaker emphasized the need for fire drill to acquaint workers with the use of fire equipment and to prevent panic in the event of a fire. With respect to fire prevention the paper outlined the routine inspection and housekeeping neces-

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Published Twice a Week by the Alma Mater Society of Queen's University

KINGSTON, ONTARIO, FRIDAY, FEBRUARY 25, 1944

No. 35

## Institute Awards Given For Papers By Scientists

A. R. Bader's Dissertation  
On Rare Metals Wins  
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SCIENCE AWARDS  
(Continued on page 4)



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In his discussion of plastics, Mr. Rothschild remarked on the outstanding progress made by plastics in this war. Their electrical, thermal, optical and mechanical properties have been used to advantage in many industries. The speaker mentioned that essential properties not found in one type are usually found in another and that plastics lend themselves more effectively to moulding than any other material. In dealing with the economic aspect of the use of plastics, Mr. Rothschild pointed out that in the synthesis of plastics many natural materials may be used, materials which previously were frequently wasted. He added that plastic manufacturers may in the future use surplus farm outputs—a factor of immense importance to Canada.

Mr. Brown discussed the possibility of using co-operative efforts to construct a swimming pool or other community enterprise. He pointed out that it would be preferable to have a service club sponsor the undertaking, and that it is essential to gain publicity through the press. The speaker discussed in detail the steps necessary to complete such an undertaking and reminded the audience that the success of the project depends entirely on the co-operation of the citizens.

Mr. Meredith discussed the manufacture of airplane propellers from aluminum, and dealt with it under blade forging, finishing, attaching to the hub, and balancing. His lec-

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### SCIENCE AWARDS

(Continued on page 4)





## Sciencemen Hear Talk On Petroleum

The origin of petroleum was the subject of a paper delivered by A. R. Bader, of Sc. '45, at a meeting of the Chemical Engineers' Club held last Tuesday afternoon.

Mr. Bader stated that although there had been three theories suggested regarding the origin of this now-precious commodity, only two remained, since the suggestion of inorganic synthesis had long been discredited.

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Mr. Bader went on to say that both the Engler and the Trieb's theories stressed the essentially organic origin of petroleum, the point of difference being that Engler favored the metamorphosis of animal remains, while Trieb's claimed that the presence of chlorophyll in crude petroleum was proof that it had been formed by the alteration of vegetable matter.

Mr. Bader concluded by saying that both theories were accepted today and that possibly the truth lies somewhere between the two.

### KINGSTON BRANCH

During the year the following meetings were held by the Branch:

- Jan. 11—**Evolution of the Steam Engine**, by Prof. D. M. Jemmett, head of Electrical Engineering Dept., Queen's University.
- Jan. 26—**Plastics**, by V. T. Griffiths, plastics engineer, Canadian General Electric Co. Ltd.
- Feb. 8—**Nylon in War and Peace**, by C. J. Warrington, development manager, Nylon Division, Canadian Industries Limited.
- Feb. 22—**Student Night. Engineering Uses of Some Unknown Metals**, by A. R. Bader (1st prize); **Fire Protection in a Small Factory**, by C. E. Leon (2nd prize); **Industrial and Economic Aspects of Plastics**, by K. Rothschild (2nd prize).
- Mar. 7—**Town Planning and the Future of Kingston**, a symposium; public meeting, A. S. Mathers, Toronto; W. Cecil Cole, Kingston; Prof. R. A. Low, Kingston.
- Apr. 25—**Annual Meeting**, with films: **Tested by Underwriters Laboratories, The Failure of the Tacoma Narrows Bridge**, and **Wings Over the North**.
- Sept. 16—**Dinner meeting**, Cataract Golf Club, Kingston. Visiting members of Council and their wives entertained by the Branch.
- Oct. 18—**The Magic of Electric Welding**, by P. H. Take, welding engineer, Canadian General Electric Co.
- Nov. 1—**Brig. J. Melville, M.C., E.D., Chairman, The Canadian Pensions Commission: Plans for the Rehabilitation of Our Armed Forces**, A public meeting.
- Nov. 15—**The Engineering History of Shipshaw**, by McNeely DuBoise, vice-president, Aluminum Company of Canada. An open meeting.
- Dec. 6—**Student Night. Alloys, the Backbone of Chemical Engineering**, by A. Bader (1st prize); **Concrete Inspection**, by R. McKnight (2nd prize).

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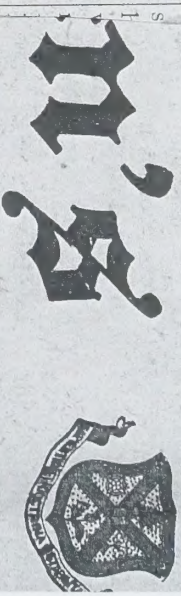
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KINGSTON, ONTARIO, FRIDAY

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A. R. Bader's Dissertation On Rare Metals Wins Top Prize

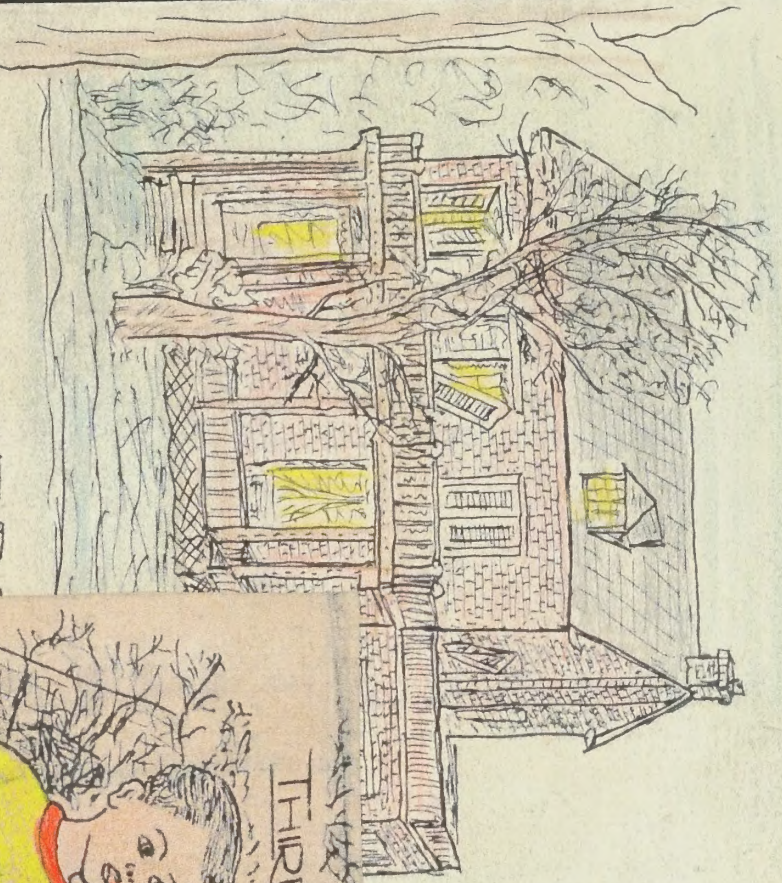
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SCIENCE AWARDS  
(Continued on page 4)



— SECOND —

— ANNIVERSARY —



THIRD



ANNIVERSARY.

If you insist on  
lemonaid,  
Follow me, my  
pretty made;  
However, if you'll  
sip this licker,  
You'll be tipsy that  
much quiquor.

